

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>JOH/iek</b>	<b>FOR FURTHER ACTION</b>	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. <b>PCT/NO 00/00200</b>	International filing date ( <i>day/month/year</i> ) <b>8 June 2000</b>	(Earliest) Priority Date ( <i>day/month/year</i> ) <b>8 June 1999</b>
Applicant <b>UNIFOB, Stiftelsen Universitetsforskning Bergen et al</b>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

#### 1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.  
PCT/NO00/00200

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The present invention describes methods, kits and compositions for the detection of ryanodine receptor antibodies in patient serum samples with the aid of N-terminal fragments of the receptor. The invention also describes a method for the manufacture of a pharmaceutical agent comprising such fragments for the prevention and/or treatment of the disease myasthenia gravis, and a method of myasthenia gravis prognosis.

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/NO 00/00200

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N33/564 A61K38/17 C07K16/28 C07K14/435

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N A61K C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	ASE MYGLAND ET AL: "Anti-cardiac ryanodine receptor antibodies in thymoma-associated myasthenia gravis" AUTOIMMUNITY, vol. 17, 1994, pages 327-331, XP002901348 page 330	1-6,8
A	ASE MYGLAND ET AL: "Thymomas express epitopes shared by the ryanodine receptor" JOURNAL OF NEUROIMMUNOLOGY, vol. 62, 1995, pages 79-83, XP002901349 page 80 page 82 -page 83	1-8

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

31 October 2000

Date of mailing of the international search report

15.12.00

Name and mailing address of the ISA

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Authorized officer

Carl-Olof Gustafsson

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GEIR OLVE SKEIE ET AL: "Autoimmunity to ryanodine receptor and titin in myasthenia gravis is associated with GM allotypes" AUTOIMMUNITY, vol. 26, 1997, pages 111-116, XP002901350 the whole document	1-8
A	ASE MYGLAND ET AL: "Ryanodine receptor autoantibodies in myasthenia gravis patients with a thymoma" ANN NEUROL, vol. 32, 1992, pages 589-591, XP002901351 the whole document	1-8
Y	CHEMICAL ABSTRACTS, vol. 130, no. 6, 8 February 1999 (1999-02-08) Columbus, Ohio, US; abstract no. 62650, LEONG, PENG ET AL: "The cytoplasmic loops between domains II and III and domains III and IV in the skeletal muscle dihydropyridine receptor bind to a contiguous site in the skeletal muscle ryanodine receptor" page 1; XP002901352 abstract & J.BIOL.CHEM., 273(45), 29958-29964, 1998,	1-6,8
Y	CHEMICAL ABSTRACTS, vol. 129, no. 3, 20 July 1998 (1998-07-20) Columbus, Ohio, US; abstract no. 24678, LEONG, PENG ET AL: "A 37-amino acid sequence in the skeletal muscle ryanodine receptor interacts with the cytoplasmic loop between domains II and III in the skeletal muscle dihydropyridine receptor" XP002901353 abstract & J.BIOL.CHEM., 273(14), 7791-7794, 1998,	1-6,8
A	DE 197 22 317 C (BOEHRINGER INGELHEIM INT) 8 October 1998 (1998-10-08) page 7	
A	US 5 358 649 A (MACLENNAN DAVID H ET AL) 25 October 1994 (1994-10-25) column 25 -column 27	1-6,8

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

287208

03/10/00

International application No.

PCT/NO 00/00200

DE	19722317	C1	08/10/98	EP	0984986 A	15/03/00
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				GB	9110865 D	00/00/00
				GB	9119250 D	00/00/00

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